
































|   |  |                                    |
|---|--|------------------------------------|
|  | Consumer   |                                    |
|  | currentCourse  | String                             |
|  | completeSignal   | CompleteSignal                     |
|  | blockingQueue  | BlockingQueue<String[]>            |
|  | latestDataPair   | ConcurrentHashMap<String, Integer> |
|  | threshold  | Integer                            |
|  | Consumer(String, CompleteSignal, BlockingQueue<String[]>, ConcurrentHashMap<String, Integer>, Integer) |                                    |
|  | run()  | void                               |




|   |  |                      |
|---|--|----------------------|
|  | Producer   |                      |
|  | concurrentDataBucket                                   | ConcurrentDataBucket |
|  | studentVlePath   | String               |
|  | completeSignal   | CompleteSignal       |
|  | Producer(String, ConcurrentDataBucket, CompleteSignal) |                      |
|  | run()  | void                 |




|   |                         |         |
|---|-------------------------|---------|
|  | CompleteSignal          |         |
|  | isCompleted             | Boolean |
|  | CompleteSignal(Boolean) |         |
|  | getCompleted()          | Boolean |
|  | setCompleted(Boolean)   | void    |




|   |                        |  |
|---|------------------------|--|
|   | ConcurrentDataBucket   |  |
|  | map                    | ConcurrentHashMap<String, BlockingQueue<String[]>> |
|  | ConcurrentDataBucket() |  |
|  | getMap()               | ConcurrentHashMap<String, BlockingQueue<String[]>> |




|   |                              |      |
|---|------------------------------|------|
|   | CompleteSignalTest           |      |
|  | completeSignalCompleteSignal |      |
|  | getCompleted()               | void |
|  | setCompleted()               | void |



|   |                         |                |
|---|-------------------------|----------------|
|  | ConcurrentProcessorTest |                |
|  | args                    | String[]       |
|  | csvData                 | List<String[]> |
|  | concurrentProcessor()   | void           |

|   |  |      |
|---|--|------|
|  | CSVFileReaderConcurrent  |      |
|  | CSVFileReaderConcurrent()  |      |
|  | readDataAndStore(String, ConcurrentHashMap<String, BlockingQueue<String[]>>, CompleteSignal) | void |

|   |                          |                      |
|---|--------------------------|----------------------|
|  | ConcurrentDataBucketTest |                      |
|  | concurrentDataBucket     | ConcurrentDataBucket |
|  | getMap()                 | void                 |

|   |                               |      |
|---|-------------------------------|------|
|  | ConcurrentProcessor           |      |
|  | DEFAULT_QUEUE_SIZE            | int  |
|  | ConcurrentProcessor(String[]) | void |

|   |   |      |
|---|---|------|
|  | CSVFileWriterConcurrent   |      |
|  | writeDataToFilesConcurrent(String, ConcurrentHashMap<String, Integer>)                      | void |
|  | writeActivityThresholdToFilesConcurrent(String, String, ConcurrentHashMap<String, Integer>) | void |

|   |                |      |
|---|----------------|------|
|  | ConcurrentMain |      |
|  | main(String[]) | void |